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EXAMINER

SHELEHEDA, JAMES R

ART UNIT	PAPER NUMBER
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2614

DATE MAILED: 06/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/712,790	Applicant(s) ELDERING ET AL.	
	Examiner James Sheleheda	Art Unit 2614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.  
2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-18 and 60-72 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-10, 12-18 and 60-72 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/21/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 is objected to because of the following informalities:

In claim 1, line 12, "one or more intervals" as contained in the previous set of claims has been improperly changed to "intervals". As this narrowing of the claim language was not properly indicated in the mark up of the claims, the claim is being interpreted to read as --one or more intervals--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7, 8, 10, 12-18 and 60-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond et al. (Zigmond) (6,698,020) (of record) in view of Doherty (US2003/0200128A1) (of record).

As to claim 1, Zigmond discloses a method of selectively inserting unscheduled advertisements into a stream of television programming (column 4, lines 7-15) at different receiving nodes of a communications network (households receiving broadcast television signals; column 7, lines 13-36), said method comprising:

(a) transmitting a stream of television programming from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(b) storing unscheduled advertisements (wherein the stored advertisements simply have rules associated with how to insert them, not specific time schedules; column 17, lines 21-28 and column 11, lines 31-49) at a node of said network (storing ads in ad repository, 86; Fig. 5, column 15, lines 24-34);

(d) selling locations to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).

(e) determining at each of said receiving nodes (through a received trigger), one or more intervals in said stream within which advertisements may be inserted (column 15, lines 35-44);

(g) inserting said unscheduled advertisement into said stream at said receiving node within said determined interval (column 15, lines 57-65).

While Zigmond discloses information determining the next unscheduled advertisement to be inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and in response to said determination retrieving the next unscheduled advertisement (Fig. 6, step 110; column 17, lines 23-32),

he fails to specifically disclose storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs), each of said ARL's comprising

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data disclosing a location of a corresponding advertisement and retrieving from said queue one of said ARLs in accordance with said order.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble an ordered list (the schedule; paragraph 29) of references (or ARLs) pointing to advertisements (paragraph 28, lines 3-7 and paragraph 29), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) for the typical benefit of providing a stored list which can help ensure that advertisements are properly prepared for output at their assigned times (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs), each of said ARLs comprising data disclosing a location of a corresponding advertisement and retrieving from said queue one of said ARLs in accordance with said order, as taught by Doherty, for the typical benefit of promoting efficient advertisement delivery by ensuring that advertisements are properly prepared for output at their assigned times.

As to claim 2, Zigmond and Doherty disclose wherein said stream includes indicators that identify the start of an avail (encoded trigger signal; see Zigmond at column 15, lines 45-52) in said stream for insertion of an advertisement (see Zigmond at column 15, lines 35-37), wherein step (e) includes detecting said indicators (see

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Zigmond at column 15, lines 57-61) and wherein step (g) includes inserting said advertisement into said avail (see Zigmond at column 15, lines 57-61).

As to claim 7, Zigmond and Doherty disclose wherein said queues are stored locally at said receiving nodes to which they correspond (wherein a local scheduler creates and stores the schedule; see Doherty at Fig. 1 and paragraph 29).

As to claim 8, Zigmond and Doherty disclose wherein step (a) includes receiving a plurality of channels of television programming (see Zigmond at column 7, lines 1-12 and 14-28) and selecting one of said channels (the currently tuned program channel; see Zigmond at column 13, lines 14-39 and column 15, lines 45-49), wherein step (e) includes detecting said avails in said selected channel (triggers in the current channel; see Zigmond at column 15, lines 45-52) and wherein step (g) includes inserting said advertisements into said avails in said selected channel (inserting ads into the current monitored stream; see Zigmond at column 15, lines 57-65).

As to claim 10, Zigmond and Doherty disclose wherein step (b) includes storing said advertisements at said receiving node (ad repository, 86 in ad insertion device 80; see Zigmond at Fig. 5, column 15, lines 24-34).

As to claim 12, Zigmond and Doherty disclose wherein step (d) includes selling the locations in said queues to advertisers (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).

As to claim 13, Zigmond and Doherty disclose wherein step (d) includes selling the locations in said queue (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) based at least partially on a repetition rate within said queue of said sold locations (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 14, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 15, Zigmond and Doherty disclose (h) recording a portion of said stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 16, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream as the stream is being recorded (wherein the

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system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 17, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 18, Zigmond and Doherty disclose wherein step (g) includes inserting said advertisements into said stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

As to claim 60, Zigmond discloses a method of inserting unscheduled advertisements into television programming stream (column 4, lines 7-15) in a communications network (Fig. 3; column 7, lines 13-36), said method comprising:

(a) transmitting said programming stream from a central location (Fig. 3, content provider, 50) to a subscriber node (households, 56 receiving broadcast signals; column 7, lines 1-12);

(c) selling locations to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).



(d) detecting intervals in said programming stream (through a received trigger), within which advertisements may be inserted (column 15, lines 35-44);

(e) inserting unscheduled advertisements into said stream within said detected intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next unscheduled advertisement to be inserted (selection criteria; Fig. 6, step 110) and inserting advertisements in accordance with said information (Fig. 6, step 110; column 17, lines 23-32),

he fails to specifically disclose storing one or more queues, said queue comprising an ordered list of unscheduled advertisements and inserting said unscheduled advertisements in accordance with said ordered list.

In an analogous art, Doherty discloses a system for displaying targeted advertising (Fig. 1; paragraph 25, lines 1-6) wherein a scheduler (140, Fig. 1) will assemble an ordered list (the schedule; paragraph 29) of references (or ARLs) pointing to advertisements (paragraph 28, lines 3-7 and paragraph 29), based upon advertisement priorities (paragraph 40), to determine the order in which advertisements are to be displayed (paragraph 38) for the typical benefit of providing a stored list which can help ensure that advertisements are properly prepared for output at their assigned times (paragraph 28, lines 1-11 and paragraph 38, lines 4-9).

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs), each of

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said ARLs comprising data disclosing a location of a corresponding advertisement and retrieving from said queue one of said ARLs in accordance with said order, as taught by Doherty, for the typical benefit of promoting efficient advertisement delivery by ensuring that advertisements are properly prepared for output at their assigned times.

As to claim 61, Zigmond and Doherty disclose wherein the queues are independent of the programming stream (wherein the advertisements to be displayed, and therefore the queue holding them, are simply dependent upon the user's viewing habits; see Zigmond at column 13, lines 7-13 and column 17, lines 21-26).

As to claim 62, Zigmond and Doherty disclose wherein the unscheduled advertisements in the queues are independent of the programming stream (wherein the advertisements to be displayed are simply dependent upon the user's viewing habits; see Zigmond at column 13, lines 7-13 and column 17, lines 21-26).

As to claim 63, Zigmond and Doherty disclose wherein each of the one or more queues is associated with a channel in the programming stream (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53).

As to claim 64, Zigmond and Doherty disclose wherein step (a) includes transmitting a plurality of channels within the programming stream and selecting one of said channels (column 11, lines 15-18), and wherein step (e) includes inserting the unscheduled advertisements (column 15, lines 57-65) from a queue associated with the selected channel (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53) into the detected intervals in the selected channel (column 15, lines 57-65).

As to claim 65, Zigmond and Doherty disclose wherein the queues are stored at the subscriber node (wherein a local scheduler creates and stores the schedule; see Doherty at Fig. 1 and paragraph 29).

As to claim 66, Zigmond and Doherty disclose wherein the locations are sold to advertisers (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).

As to claim 67, Zigmond and Doherty disclose wherein the locations are sold (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) based at least partially on a repetition rate within the queue of the sold locations (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 68, Zigmond and Doherty disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 69, Zigmond and Doherty disclose (f) recording a portion of said programming stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 70, Zigmond and Doherty disclose wherein the unscheduled advertisements are inserted into said programming stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 71, Zigmond and Doherty disclose wherein the unscheduled advertisements are inserted into said programming stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 72, Zigmond and Doherty disclose wherein the unscheduled advertisements are inserted into said programming stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

4. Claims 3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Doherty as applied to claims 2, 20, 39 and 51 above, and further in view of Bhagavath et al. (Bhagavath) (6,505,169) (of record).

As to claim 3, while Zigmond and Doherty disclose indicators for upcoming avails and ARLs corresponding to advertisements, they fail to specifically disclose identifying a duration of said avail and identifying a duration of said advertisement.

In an analogous art, Bhagavath discloses a system for insertion advertisements into media (column 1, lines 65-67 and column 2, lines 1-10) which will provide media metadata (Fig. 10) indicating intervals when ads are to be inserted and the duration of the ad interval (column 6, lines 44-48) and ad metadata (Fig. 9A) defining a duration of an ad (column 6, lines 25-31) and wherein a particular ad is chosen by comparing the two types of data (column 6, lines 18-24) for the typical benefit of ensuring that a selected ad will fit into a particular ad slot.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to include identifying a duration of said avail and identifying a

duration of said advertisement, as taught by Bhagavath, for the typical benefit of selecting an advertisement of appropriate duration for any particular ad slot.

As to claim 4, Zigmond, Doherty and Bhagavath disclose wherein said order of said ARLs in said queue is based at least partially on said duration of said advertisements relative to said duration of avails detected in said stream (based upon a comparison of an ad duration and an ad slot duration; see Bhagavath at column 6, lines 18-21, 29-31 and 44-48).

As to claim 5, Zigmond, Doherty and Bhagavath disclose

- (h) determining at least one characteristic of a viewer of said television programming (determining user preferences; see Zigmond at column 11, lines 13-19 and lines 24-30); and
- (i) ordering said queue based at least partially on said at least one characteristic (wherein the ad selections are based upon the viewer data; see Zigmond at column 11, lines 13-19 and lines 42-49).

As to claim 6, Zigmond, Doherty and Bhagavath disclose wherein said at least one characteristic is based on the content of the stream prior to said interval (wherein the determined user characteristic at any particular interval is inherently based on viewing habits prior to the interval; see Zigmond at column 11, lines 13-18).

As to claim 9, Zigmond, Doherty and Bhagavath disclose

(h) receiving at said receiving node instructions (selection rules and parameters; see Zigmond at column 11, lines 66-67 and column 12, lines 1-14 and lines 25-32) dictating how to order said ARLs in said queue (dictating the selection of advertisements; see Zigmond at column 11, lines 35-49); and

wherein step (c) includes ordering said queue in accordance with said instructions (wherein the queue is ordered based upon instructions concerning when and how the ads should be played; see Doherty at paragraph 40).

5. Claims 1, 2, 7, 8, 10, 12-18 and 60-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond in view of Guyot et al. (Guyot) (6,119,098).

As to claim 1, Zigmond discloses a method of selectively inserting unscheduled advertisements into a stream of television programming (column 4, lines 7-15) at different receiving nodes of a communications network (households receiving broadcast television signals; column 7, lines 13-36), said method comprising:

(a) transmitting a stream of television programming from a central location (Fig. 3, content provider, 50) to one or more receiving nodes (households, 56 receiving broadcast signals; column 7, lines 1-12);

(b) storing unscheduled advertisements (wherein the stored advertisements simply have rules associated with how to insert them, not specific time schedules; column 17, lines 21-28 and column 11, lines 31-49) at a node of said network (storing ads in ad repository, 86; Fig. 5, column 15, lines 24-34);

(d) selling locations to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).

(e) determining at each of said receiving nodes (through a received trigger), one or more intervals in said stream within which advertisements may be inserted (column 15, lines 35-44);

(g) inserting said unscheduled advertisement into said stream at said receiving node within said determined interval (column 15, lines 57-65).

While Zigmond discloses information determining the next unscheduled advertisement to inserted (selection criteria; Fig. 6, step 110), corresponding to a subset of said plurality of receiving nodes (corresponding to a particular viewer; column 11, lines 35-49) and in response to said determination retrieving the next unscheduled advertisement (Fig. 6, step 110; column 17, lines 23-32),

he fails to specifically disclose storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs), each of said ARL's comprising data disclosing a location of a corresponding advertisement and retrieving from said queue one of said ARLs in accordance with said order.

In an analogous art, Guyot discloses a system for displaying targeted advertising (Fig. 1; column 3, lines 13-16) wherein a queue of targeted advertisements is transmitted from a server to a subscriber system (column 5, lines 18-22 and column 4, lines 29-39) containing address locations advertisements (column 4, lines 49-50) and advertisements are then selected from the ad queue for display (column 7, lines 58-62)



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for the typical benefit of providing a stored queue which can help ensure that advertisements can be properly prepared for output at their assigned times.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs), each of said ARLs comprising data disclosing a location of a corresponding advertisement and retrieving from said queue one of said ARLs in accordance with said order, as taught by Guyot, for the typical benefit of promoting efficient advertisement delivery by ensuring that advertisements are properly prepared for output at their assigned times.

As to claim 2, Zigmond and Guyot disclose wherein said stream includes indicators that identify the start of an avail (encoded trigger signal; see Zigmond at column 15, lines 45-52) in said stream for insertion of an advertisement (see Zigmond at column 15, lines 35-37), wherein step (e) includes detecting said indicators (see Zigmond at column 15, lines 57-61) and wherein step (g) includes inserting said advertisement into said avail (see Zigmond at column 15, lines 57-61).

As to claim 7, Zigmond and Guyot disclose wherein said queues are stored locally at said receiving nodes to which they correspond (see Guyot at column 4, lines 28-38).

As to claim 8, Zigmond and Guyot disclose wherein step (a) includes receiving a plurality of channels of television programming (see Zigmond at column 7, lines 1-12 and 14-28) and selecting one of said channels (the currently tuned program channel; see Zigmond at column 13, lines 14-39 and column 15, lines 45-49), wherein step (e) includes detecting said avails in said selected channel (triggers in the current channel; see Zigmond at column 15, lines 45-52) and wherein step (g) includes inserting said advertisements into said avails in said selected channel (inserting ads into the current monitored stream; see Zigmond at column 15, lines 57-65).

As to claim 10, Zigmond and Guyot disclose wherein step (b) includes storing said advertisements at said receiving node (ad repository, 86 in ad insertion device 80; see Zigmond at Fig. 5, column 15, lines 24-34).

As to claim 12, Zigmond and Guyot disclose wherein step (d) includes selling the locations in said queues to advertisers (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).

As to claim 13, Zigmond and Guyot disclose wherein step (d) includes selling the locations in said queue (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) based at least partially on a repetition rate within said queue of said sold locations (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 14, Zigmond and Guyot disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 15, Zigmond and Guyot disclose (h) recording a portion of said stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 16, Zigmond and Guyot disclose wherein step (g) includes inserting said advertisements into said stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 17, Zigmond and Guyot disclose wherein step (g) includes inserting said advertisements into said stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 18, Zigmond and Guyot disclose wherein step (g) includes inserting said advertisements into said stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when

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a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

As to claim 60, Zigmond discloses a method of inserting unscheduled advertisements into television programming stream (column 4, lines 7-15) in a communications network (Fig. 3; column 7, lines 13-36), said method comprising:

(a) transmitting said programming stream from a central location (Fig. 3, content provider, 50) to a subscriber node (households, 56 receiving broadcast signals; column 7, lines 1-12);

(c) selling locations to third parties (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).

(d) detecting intervals in said programming stream (through a received trigger), within which advertisements may be inserted (column 15, lines 35-44);

(e) inserting unscheduled advertisements into said stream within said detected intervals (column 15, lines 57-65).

While Zigmond discloses information determining the next unscheduled advertisement to be inserted (selection criteria; Fig. 6, step 110) and inserting advertisements in accordance with said information (Fig. 6, step 110; column 17, lines 23-32),

he fails to specifically disclose storing one or more queues, said queue comprising an ordered list of unscheduled advertisements and inserting said unscheduled advertisements in accordance with said ordered list.

In an analogous art, Guyot discloses a system for displaying targeted advertising (Fig. 1; column 3, lines 13-16) wherein a queue of targeted advertisements is transmitted from a server to a subscriber system (column 5, lines 18-22 and column 4, lines 29-39) and advertisements are then selected from the ad queue for display (column 7, lines 58-62) for the typical benefit of providing a stored queue which can help ensure that advertisements can be properly prepared for output at their assigned times.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond's system to include storing a queue, said queue comprising an ordered list of advertisement resource locators (ARLs), each of said ARLs comprising data disclosing a location of a corresponding advertisement and retrieving from said queue one of said ARLs in accordance with said order, as taught by Guyot, for the typical benefit of promoting efficient advertisement delivery by ensuring that advertisements are properly prepared for output at their assigned times.

As to claim 61, Zigmond and Guyot disclose wherein the queues are independent of the programming stream (wherein the advertisements to be displayed, and therefore the queue holding them, are simply dependent upon the user's viewing habits; see Zigmond at column 13, lines 7-13 and column 17, lines 21-26).

As to claim 62, Zigmond and Guyot disclose wherein the unscheduled advertisements in the queues are independent of the programming stream (wherein the advertisements to be displayed are simply dependent upon the user's viewing habits; see Zigmond at column 13, lines 7-13 and column 17, lines 21-26).

As to claim 63, Zigmond and Guyot disclose wherein each of the one or more queues is associated with a channel in the programming stream (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53).

As to claim 64, Zigmond and Guyot disclose wherein step (a) includes transmitting a plurality of channels within the programming stream and selecting one of said channels (see Zigmond at column 11, lines 15-18), and wherein step (e) includes inserting the unscheduled advertisements (see Zigmond at column 15, lines 57-65) from a queue associated with the selected channel (wherein the advertisements to be displayed, and therefore the queue holding them, are dependent upon, and therefore associated with, the current channel being viewed; see Zigmond at column 12, lines 47-53) into the detected intervals in the selected channel (see Zigmond at column 15, lines 57-65).

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As to claim 65, Zigmond and Guyot disclose wherein the queues are stored at the subscriber node (see Guyot at column 4, lines 28-38).

As to claim 66, Zigmond and Guyot disclose wherein the locations are sold to advertisers (wherein third party advertisers contract to have their ads inserted to consumers; see Zigmond at column 8, lines 22-29).

As to claim 67, Zigmond and Guyot disclose wherein the locations are sold (selling a predetermined number of ad exposures; see Zigmond at column 8, lines 22-29) based at least partially on a repetition rate within the queue of the sold locations (wherein the ad is repeated a set number of times within a given time period; see Zigmond at column 13, lines 40-45).

As to claim 68, Zigmond and Guyot disclose wherein said repetition rate is non-linear (wherein the ad is blocked after a set number of presentations, which stops the ad from repeating at the same rate, to prevent frustration from viewers; see Zigmond at column 13, lines 40-47).

As to claim 69, Zigmond and Guyot disclose (f) recording a portion of said programming stream for subsequent playback (see Zigmond at column 3, lines 9-12 and column 14, lines 1-12).

As to claim 70, Zigmond and Guyot disclose wherein the unscheduled advertisements are inserted into said programming stream as the stream is being recorded (wherein the system inserts ads into the received stream being recorded whenever the indicator appears; see Zigmond at column 14, lines 1-12 and column 15, lines 45-65).

As to claim 71, Zigmond and Guyot disclose wherein the unscheduled advertisements are inserted into said programming stream when the stream is played back (replacing older ads with newer ones in the recorded material; see Zigmond at column 14, lines 1-12).

As to claim 72, Zigmond and Guyot disclose wherein the unscheduled advertisements are inserted into said programming stream (the current video stream being received and displayed) between the time the stream is recorded and the time it is played back (when a program is recorded and played back at a later time, such as the next day, the system would be continuing to insert ads into the received video stream during that time period; see Zigmond at column 17, lines 21-32).

6. Claims 3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zigmond and Guyot as applied to claims 2, 20, 39 and 51 above, and further in view of Bhagavath.



As to claim 3, while Zigmond and Guyot disclose indicators for upcoming avails and ARLs corresponding to advertisements, they fail to specifically disclose identifying a duration of said avail and identifying a duration of said advertisement.

In an analogous art, Bhagavath discloses a system for insertion advertisements into media (column 1, lines 65-67 and column 2, lines 1-10) which will provide media metadata (Fig. 10) indicating intervals when ads are to be inserted and the duration of the ad interval (column 6, lines 44-48) and ad metadata (Fig. 9A) defining a duration of an ad (column 6, lines 25-31) and wherein a particular ad is chosen by comparing the two types of data (column 6, lines 18-24) for the typical benefit of ensuring that a selected ad will fit into a particular ad slot.

It would have been obvious to one of ordinary skill in the art at the time of invention by applicant to modify Zigmond and Guyot's system to include identifying a duration of said avail and identifying a duration of said advertisement, as taught by Bhagavath, for the typical benefit of selecting an advertisement of appropriate duration for any particular ad slot.

As to claim 4, Zigmond, Guyot and Bhagavath disclose wherein said order of said ARLs in said queue is based at least partially on said duration of said advertisements relative to said duration of avails detected in said stream (based upon a comparison of an ad duration and an ad slot duration; see Bhagavath at column 6, lines 18-21, 29-31 and 44-48).

As to claim 5, Zigmond, Guyot and Bhagavath disclose

(h) determining at least one characteristic of a viewer of said television programming (determining user preferences; see Zigmond at column 11, lines 13-19 and lines 24-30); and

(i) ordering said queue based at least partially on said at least one characteristic (wherein the ad selections are based upon the viewer data; see Zigmond at column 11, lines 13-19 and lines 42-49).

As to claim 6, Zigmond, Guyot and Bhagavath disclose wherein said at least one characteristic is based on the content of the stream prior to said interval (wherein the determined user characteristic at any particular interval is inherently based on viewing habits prior to the interval; see Zigmond at column 11, lines 13-18).

As to claim 9, Zigmond, Guyot and Bhagavath disclose

(h) receiving at said receiving node instructions (selection rules and parameters; see Zigmond at column 11, lines 66-67 and column 12, lines 1-14 and lines 25-32) dictating how to order said ARLs in said queue (dictating the selection of advertisements; see Zigmond at column 11, lines 35-49); and

wherein step (c) includes ordering said queue in accordance with said instructions (wherein the advertisements are selected from the queue for use based upon the context info for the ads; see Guyot at column 4, lines 28-67 and column 7, lines 58-62).

***Response to Arguments***

7. Applicant's arguments filed 03/04/05 have been fully considered but they are not persuasive.

a. On page 11, applicant argues that Zigmond does not use or insert "unscheduled" advertisements, as his ads are associated with a particular advertisement space, time slot and/or program content.

In response, Zigmond discloses downloading a plurality of advertisements with parameters detailing what type of advertisement it is (column 12, lines 15-32 and column 11, lines 37-42). There is no set schedule to insert these advertisements at any particular time. Ad selection rules are then used to properly match an advertisement with viewer information or program content information (column 11, lines 42-49). As the advertisements of Zigmond are specifically not scheduled in advance, as they are not selected for insertion until a television channel is being received and displayed (see Fig. 6; column 17, lines 21-32), they more than meet the broad claim limitation of "unscheduled".

b. On page 12, applicant argues that Doherty generates a definite time-based schedule of which and when ads are to be inserted, and therefore doesn't teach inserting unscheduled advertisements.

In response, as indicated in the rejections above, Zigmond discloses receiving and storing a plurality of *unscheduled* advertisements and selecting a

*single* advertisement to insert into the next available ad slot. Doherty has simply been relied upon to teach utilizing an ad queue containing an ordered list of how to insert the next *several* advertisements.

The combination of Zigmond and Doherty then teaches selecting a plurality of unscheduled advertisements from the received unscheduled ads to be inserted next.

c. On page 12, applicant argues that Doherty does not teach or suggest creating or storing a queue having ordered list of ARLs corresponding to the unscheduled ads to be inserted, as Doherty suggests that the ads are prioritized and scheduled at a particular instant in time rather than placing the them in a queue.

In response, Doherty takes a plurality of advertisements (paragraph 25, lines 1-8) and then generates some schedule on what order to best display the advertisements based upon their priorities (paragraph 25, lines 6-15).

Dependent upon any user interaction, the schedule is then cleared and regenerated based upon the new conditions (paragraph 25, lines 15-30). Once the user has finished interacting with the system, the ads are then shown in accordance with the newly created schedule (paragraph 25, lines 15-30).

Doherty further discloses wherein the schedule contains references pointing to the particular advertisement locations in storage (paragraph 28, lines 3-7 and

paragraph 29). This clearly meets the claim limitation of a queue having ordered list of ARLs corresponding to the unscheduled ads to be inserted.

d. In regards to applicant's argument on page 12 that Doherty teaches away from the use of a queue, it is noted that Doherty is defining the specific word "queue" as a inflexible list which won't be changed (paragraph 25, lines 30-35). The "schedule" defined by Doherty is simply a list defining the order to insert ads, which is "more flexible" and will prioritize ads at a particular instant in time (i.e. since the last user interaction; paragraph 25, lines 8-35), and thus meets the claim limitations. Doherty's choice of different language doesn't negate the fact that his "schedule" clearly meets the current claim limitations.

e. On page 12, applicant argues that Doherty does not teach or suggest selling locations within the queue.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Zigmond clearly discloses wherein third party advertisers contract to have their ads inserted to consumers (see Zigmond at column 8, lines 22-29). Doherty

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teaches wherein ads are inserted according to a queue (schedule; see Doherty at paragraph 25).

It is the combination of Zigmond and Doherty which teaches "selling locations within the queue", as advertisers are being charged to include their ads inside the queue for insertion and display to viewers.

f. As to applicant's arguments on page 13, paragraph 1, see the rejections and (a)-(d) above.

g. In regards to applicant's arguments to claims 2, 7, 8, 10, 12-18 and 60-72, see the rejections and (a)-(d) above.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

### **Certificate of Mailing**

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Sheleheda whose telephone number is (571) 272-7357. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James Sheleheda  
Patent Examiner  
Art Unit 2614

JS

  
**JOHN MILLER**  
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